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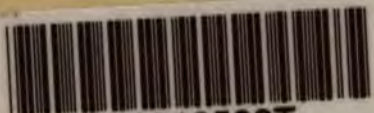
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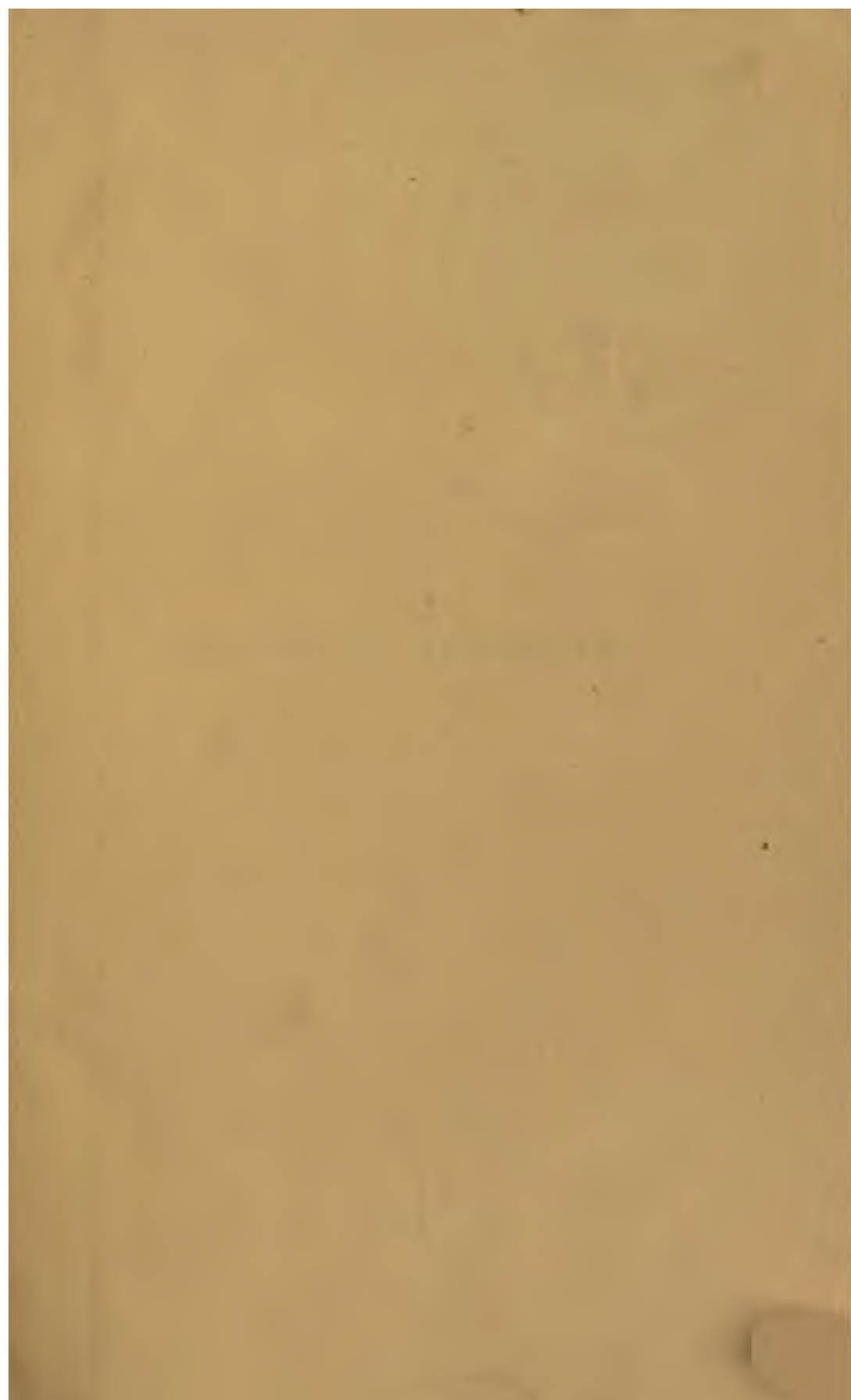


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GRASSES OF SCOTLAND.



THE
GRASSES OF SCOTLAND.

BY

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AUTHOR OF THE ICHTHYOLOGY OF THE FIRTH OF FORTH, &c.

ILLUSTRATED BY FIGURES
DRAWN AND ENGRAVED BY THE AUTHOR.

————— the bare earth
Brought forth the tender grass, whose verdure clad
Her universal face with pleasant green.

MILTON.

WILLIAM BLACKWOOD AND SONS, EDINBURGH;
AND 22, PALL MALL, LONDON.

MDCCCXLII.

P R E F A C E.

THE work here offered to the public on the Grasses of Scotland is designed to afford to the student of this difficult department of Botany, assistance of a more available kind than the treatises in general use attempt to supply. In most other respects it proceeds on the established plan of works of the same description.

Much attention has been bestowed on the definitions both of genera and species. In some instances new genera have been framed, and a few new species have been added, while the specific characters are determined throughout with the greatest possible care.

The authorities for the species adopted, both British and foreign, have been invariably cited. But no character has been taken on trust, or has been admitted without careful examination to ascertain its presence in every instance. And in the cases, (which are not few,) where new characters have been substituted, their constancy has been tested by the examination of at least one hundred specimens of each species, obtained from various localities.

In the description of each grass, the state of every individual part has been carefully set down, so that, on the comparison of any two descriptions, the several differences between the species inspected will be at once apparent. And in addition to this assistance, an endeavour has been made to point out the most prominent diagnostic marks between those species which are most liable to be confounded.

Of each species a figure has been given. In every instance these figures have been drawn and engraved by the author; and though

such attempts lose the advantage of being done in an artist-like manner, it perhaps outweighs this drawback in a work for practical use, that the several steps of the labour are performed by one familiar with the minute parts of the objects copied. Nearly the whole of the figures are of natural size, and have been obtained from recent specimens, while in no instance has any use been made of plates already published. Of the parts of the flower, magnified views are likewise given. With regard to the varieties occurring under certain species, pains have been taken to name and describe shortly all those that seem to deserve such notice; and of each of these a figure has been given.

Under the head of habitat the several countries in which each species is known to be produced are expressly stated. The range of the altitude of the places of growth is specified as accurately as possible. The time when the seed is matured (which it is often useful to know), as well as the time of flowering, is everywhere indicated. And notices are introduced of the agricultural and other properties of such species as are of any value.

My original purpose was to embrace in this work all the Grasses of the United Kingdom, but the want of recent specimens of the Grasses peculiar to England and to Ireland, made it necessary that, for the present, I should limit my plan. I propose, however, as soon as I have gained the proper opportunities, to publish a similar account of those additional species.

I have given a list of all the Grasses found within fifteen miles of Edinburgh; and in this list will be found a few beyond those in Greville's *Flora Edinensis* or Woodforde's Catalogue.

I have attempted an arrangement of the species of the Grasses of Scotland on the dichotomous plan, the mere inspection of which will, I think, sufficiently explain the use that may be made of it.

The number of species and varieties described and delineated in this work is altogether one hundred and thirty-three,—and, with the exceptions referred to in the following table, the arrangement and synonymes followed by Sir William Hooker in his *British Flora* have been adopted.

<i>Agrostis Spica Venti</i>	<i>Anemagrostis Spica Venti</i> .
<i>Melica cærulea</i>	<i>Molinia cærulea</i> .
<i>Triticum loliaceum</i>	<i>Poa loliacea</i> .
<i>Festuca calamaria</i>	<i>Poa sylvatica</i> .
<i>Festuca loliacea</i>	<i>Bucetum loliaceum</i> .
<i>Festuca pratensis</i>	<i>Bucetum pratense</i> .
<i>Festuca elatior</i>	<i>Bucetum elatius</i> .
<i>Bromus giganteus</i>	<i>Bucetum giganteum</i> .
<i>Avena pratensis</i>	<i>Trisetum pratense</i> .
<i>Avena alpina</i>	<i>Trisetum pratense</i> .
<i>Avena paniculmis</i>	<i>Trisetum pratense</i> .
<i>Avena pubescens</i>	<i>Trisetum pubescens</i> .
<i>Avena flavescens</i>	<i>Trisetum flavescens</i> .
<i>Festuca Myurus</i>	<i>Festuca bromoides</i> .
<i>Festuca rubra</i>	<i>Festuca duriuscula</i> .
<i>Brachypodium sylvaticum</i>	<i>Triticum sylvaticum</i> .

I should perhaps add before concluding, that my pretensions to attempt a work in this difficult department of Botany rest, among other grounds, on my possessing an extensive collection of Grasses made by myself, not only throughout this island, but also in the West Indies and the southern parts of North America, as well as, on an unlimited freedom of access to the Herbarium of the Royal Botanical Society of Edinburgh, and to the rich collections of Professor Graham and of Dr Greville of Edinburgh, and of Professor Balfour of Glasgow.

Edinburgh,
September 26th 1842.

GRASSES

FOUND WITHIN FIFTEEN MILES OF EDINBURGH, THEIR PRINCIPAL
LOCALITIES AND TIME OF FLOWERING.

Nardus stricta, frequent on Braid and Pentland Hills; North Queensferry; Dalmahoy; sides of Ravelrig Bog. Commences to flower in the first week of July. (Plate II.)

Rottbollia incurvata, said to have been found on Musselburgh Links. Flowers in the third week of July. (Plate II.)

—— *filiformis*, frequent in salt marshes near Aberlady. (Plate III.)

Alopecurus agrestis, in fields near Tranent. Flowers in the first week of July. (Plate III.)

Alopecurus pratensis, found in almost every meadow; Lochend; Duddingston Loch; King's Park. Commences to flower in the last week of April. (Plate IV.)

Alopecurus geniculatus, frequent on the sides of ponds and ditches. Duddingston Loch; Lochend; Braid Hill marshes; ditches in the King's Park, &c. Flowers in the first week of June. (Plate V.)

Phleum pratense, frequent in meadows; Lochend; King's Park; fields under the Pentland Hills; Liberton, &c. Flowers in the third week of June. (Plate VI.)

Phleum arenarium, sea-shore near Burntisland; near Prestonpans; between Pettycur and Kirkaldy; west of North Queensferry. Flowers in the second week of July. (Plate VII.)

Anthoxanthum odoratum, common in Roslin wood; Caroline Park; Braid Hill; Auchindinny woods, &c. &c. Flowers in the second week in April. (Plate VIII.)